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NEW AND LITTLE-KNOWN BALL GEOMETRIDAE IN THE TRING MUSEUM.

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FOLLOWING up his very successful Javan collecting, some of the fruits of which have already been made known (see Nov. Zool., xxxix, 221), Mr. J. P. A. Kalis in 1934–35 made further extensive collections on Bali. The Geometridae of this island have never received any special attention, although many new species, chiefly from Doherty's collecting, were described by Warren, with some additions from Swinhoe and myself, and scattered faunistic records will be found in vol. xii of Scitz's Macrolepidoptera and in a few revisions of individual groups. It is not surprising, however, that this additional material has added greatly to our knowledge and it is only to be regretted that few important zoogeographical deductions are yet possible, on account of the comparative paucity of corresponding material from the islands to the eastward.

In order to avoid repetition in the body of this paper, the data, as furnished by Mr. Kalis, are given here.

Mondoktoempang, W. Bali, 2,500 feet, October and November 1934.

Prapetagoeng, W. Bali, 1,500 feet, May 1935.

Batoeriti, E. Bali, 3,500 feet, June 1935.

SUBFAM. OENOCHROMINAE.

1. Eumelea biflavata Warr.

Eumelea tudovicata biflavata Warr., Nov. Zool., iii, 357 (1896) (Pulo Laut, type: Nias)

Somewhat unaceountably, only one specimen was obtained, a of from Mondoktoempang, November, in very good condition. I expect it will prove to be a subspecies; rather small, the median line of both wings exceptionally slender and sharply defined, rather straighter than usual, yellow spot at apex of forewing small but distinet, yellow discal patches rather ill-defined. Probably biflavata has here reached its south-eastern limit; even on Java it seems to be searce. The previously recorded distribution is Nias, Sumatra, Java, Penang, Borneo, Sulu, with races—not very sharply differentiated—in N.E. India, Tonkin, Hainan, Formosa and the Liu-kiu Islands.

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SUBFAM. HEMITHEINAE.

2. Epipristis storthophora sp. n.

3, 26-27 mm. Size of a rather small minimaria (Guen., 1858), but with the green colour and heavy black cell-marks of nelearia (Guen.). Both wings with some black maculation close to base; forewing with antemedian line thick, irregularly zigzag, the tooth outward in cell stronger than in nelearia, the one behind it longer, but scarcely so acutely pointed as in most nelearia; both wings with postmedian line much more deeply dentate than in the species named, the spots outside it more blackish, the terminal dots more triangular. Underside with the cell-spots intense, the black borders strong, that of the forewing proximally less curved than in the allies, distally reaching (or almost reaching) the termen except at apex, that of the hindwing proximally less wavy, distally reaching nearer to the termen than in most nelearia, but not so nearly as in most minimaria.

Prapetagoeng, 4 $\Im\Im$. A worn \Im was also taken with the following in November.

3. Epipristis nelearia accessa subsp. n.

 \Im , 32–34 mm.; \Im , 36–44 mm. On an average larger than *n. nelearia* (Guen. 1858, Borneo), forewing with the cell-mark elongate, the shades between post-median and subterminal greyish, usually weaker anteriorly than posteriorly, subterminal rather broad and distinct; underside, especially in the \Im , with the blackest (the proximal) part of the outer band narrowed, the distal only weakly suffused, or sometimes wanting.

Mondoktoempang, $2 \circlearrowleft \circlearrowleft$, $2 \circlearrowleft \circlearrowleft$.

I formerly overlooked the racial characters, which at best are not very strong, in 3 33 from E. Java (Nongkodjadjar and Singolangoe), which I unite with n. accessa.

4. Agathia affluens sp. n.

3, 46 mm. In markings almost exactly like discisticta Prout (1912), which is now almost certainly known to be the 3 of gigantea Butl. (1889); differs, apart from its larger size, in the following particulars.

Forewing with the tooth in the termen at R³ rather stronger, hindwing with the corresponding tooth weaker, in both respects intermediate towards the shape of diversiformis Warr. (1894); almost all the markings somewhat more ample, mostly rather paler and more violaceous; basal patch of forewing elongate as in diversiformis, projection of green ground-colour outward (at and behind R³) more acute and elongate.

Mondoktoempang, November, the type only.

The coloration recalls that of exquisita Warr. (1899).

5. Agathia laqueifera Prout.

Agathia laqueifera Prout, Gen. Ins., 129, p. 60 (1912) (Upper Assam).

Mondoktoempang, an unusually large 3 (fully 40 mm.) of the recurrent aberration which I have named ab. vernifera (Seitz, Macrolep., xii, 72).

This slightly extends the range of the species, which is chiefly Malaysian and of which I included one old 3 from "Java" (East India Company) in my original description, also approximately of this form.

6. Uliocnemis castalaria lepturges subsp. n.

Differs from c. castalaria (Oberth., 1916, Khasia Hills) in having the violetgrey terminal patches reduced, that of the hindwing ending in a definitely smaller red-brown mark.

Mondoktoempang, 4 &&, including the type; Prapetagoeng, 2 &&.

Besides Assam, the species has been recorded from the Malay Peninsula, Tonkin and W. China.

7. Rhomborista megaspilaria purgata subsp. n.

 \circlearrowleft , 23–28 mm. In addition to its small size distinguishable from m. megaspilaria (Guen., 1858, Borneo) by the extreme narrowing of the purple terminal markings of the hindwing; in the type, which is the smallest specimen, the tornal and hindmarginal marks of the forewing are also wanting, so that at first glance the specimen does not even look like a Rhomborista; but the two paratypes have a blackish-purple patch from tornus to M^1 , thus resembling an aberration which is well known in m. lyra (Swinh., 1892, N.E. India).

Prapetagoeng, 3 33.

Probably very variable. At the higher altitude (Mondoktoempang), to judge from a single δ , megaspilaria seems to revert towards the more normal Malaysian forms and it is possible that further material will show that we have to do with a local aberration rather than a stabilized subspecies.

8. Thalassodes griseifimbria sp. n.

3, 35–37 mm. Face green. Palpus with terminal joint short (well under ½ second joint). Hindtibia slender.

Wings shaped nearly as in the *veraria* (Guen.) group, the termen of the forewing a little straighter; angle of hindwing weak. Deeper green than in the allies (near Russian green of Ridgway, or rather of R. Oberthür, pl. 229, 2-3).

Forewing with the costal edge only extremely slenderly pale buff; antemedian line obsolete; postmedian excessively slender, almost as proximally placed as in grammonota Prout (1916), not traceable quite to the costa; terminal line slightly darkened but without black dots; fringe green in proximal half, grey in distal.——Hindwing with the line normally formed, slender, weakening behind its angle; fringe as on forewing.

Underside only a little less deep green than upperside.

Batoeriti, 2 & &, in good condition. Also a & from Nongkodjadjar, E. Java, 4,000 feet, which I had put aside for further study.

From furvifimbria Prout (1917, Ceylon) quite distinct in its shorter palpus and less bent distal margins.

9. Oenospila strix gemmans Prout.

Oenospila strix gemmans Prout, Nov. Zool., xxxix, 224 (1935) (E. Java).

Batoeriti, 1 \mathcal{Q} , referable to this recently described race or possibly a closely similar new one, the postmedian dots in their central part only 2.5 mm. from termen instead of 3 mm., the abdominal marginal patch of hindwing slightly more red-brown and a trifle further reduced in size.

10. Hemithea undifera (Walk.)

Thalera undifera Walk., List Lep. Ins., xxii, 601 (1861) (Sarawak).

Mondoktoempang, 2 $\circlearrowleft \circlearrowleft$; Batoeriti, 1 \circlearrowleft . Also a \circlearrowleft from Trettes, E. Java, and one from Nongkodjadjar.

Very likely a new subspecies of this elusive species, but with only Walker's extremely faded type and a scarcely less faded series from S. Celebes (Doherty) not yet differentiated it is impossible to begin any serviceable analysis.

11. Hemithea antigrapha Prout.

Hemithea antigrapha Prout, Ann. Mag. Nat. Hist. (8), xx, 122, t. vii, f. 11 (1917) (Khasis).

A \upbeta from Mondoktoempang and a \upphi from Prapetagoeng seem to agree accurately with this species except that the abdomen does not show the dark dorsal spots. Perhaps a new subspecies. More typical antigrapha have been received from the Malay Peninsula.

12. Hemithea tranquilla Prout.

Hemithea tranquilla Prout, Nov. Zool., xxxix, 224 (1935) (E. Java).

A \circlearrowleft from Batoeriti and probably a \circlearrowleft from Mondoktoempang, both in fair condition, are pretty safely referable to this recently described species, though the \circlearrowleft (hitherto unknown in *tranquilla*) shows a reddish dorsal patch which brings it nearer to *simplex*.

13. Hemithea vesta Prout.

Hemithea vesta Prout, Nov. Zool., xxxix, 224 (1935) (E. Java).

Prapetagoeng, 1 3, rather small and in very poor condition but well recognizable, without dissection, by the antenna, abdomen, wing-shape and course of the lines.

The genus has also other representatives on the island, belonging to *tritonaria* (Walk. [1863]) sens. lat., probably embracing two or three species, but mostly faded and requiring close anatomical investigation; I consider it better to hold these over until fresher specimens are available or until the whole genus is more thoroughly revised.

14. Diplodesma androcmes sp. n.

 \circlearrowleft , 16–18 mm.; \circlearrowleft , 18–19 mm. Closely similar to D. subtusumbrata (A. Fuchs, 1902, E. Sumatra), especially in the \circlearrowleft , which has all the spurs present and is superficially scarcely distinguishable except that the lines are somewhat finer and straighter. Referable, however, to section C (Prout in Seitz, Macrolep., xii, 117), "forewing with SC² wanting" 11 — \circlearrowleft with the dark subterminal band of the underside much reduced, in the type confined to a small posterior part of the forewing, in the Javan \circlearrowleft showing also at the costal margin of the hindwing, in the \circlearrowleft nearly or quite complete on the hindwing and approaching the costa on the forewing.

Prapetagoeng, May, the \Im type; Mondoktoempang, October, a much-damaged \Im and a good \diamondsuit . Also from Kangean (J. P. A. Kalis), April 1932: Karuaru, 2 \diamondsuit Aerkohkep, 1 \diamondsuit ; and E. Java: Trettes, May 1932, 1 \Im .

 $^{^{}t}$ In the $\mbox{$\mathbb{Q}$}$ from Aerkohkep this vein is conserved, running into the costal ; i.e. a throw-back to section B.

Easily distinguishable from the species with the same venation: from contracta (Warr., 1896, Assam) by its less narrow wings, the hindwing less produced to a tail; from caudularia (Guen., 1858, India) by its banded underside.

15. Iodis subtractata accumulata subsp. n.

3, 24 mm. More heavily irrorated with green than s. subtractata (Walk. [1863]), excepting perhaps the ab. spumifera Warr., the cloudy shading about, and proximal to, the cell-marks more complete and band-like, sinuous postmedian also broadened, sharply defined distally (being succeeded by more or less definite traces of a white subterminal line), perhaps a little nearer to the termen than in the name-typical race.

Mondoktoempang ,October, 4 33.

16. Pyrrhorachis pyrrhogona succornuta subsp. n.

Border of forewing with a very small and narrow red extension from tornus, pointing obliquely inward aeross SM².

Mondoktoempang, $2 \ \mathcal{J} \mathcal{J}$. Tring Museum has a similar $\ \mathcal{I}$ from N. Borneo. An interesting link between the typical p. pyrrhogona (Walk., 1866, S. India) and the Papuan p. cornuta (Warr., 1896) series, which was once sunk as synonymous, then again raised to the potential status of a species.

SUBFAM. STERRHINAE.

17. Organopoda orbata perorbata subsp. n.

Cell-spots (both wings) still larger than in o. orbata Warr. (1907, New Guinea). Will pretty certainly prove to be a separate race, though confirmatory material from both sources is desirable.

Mondoktoempang, October, 1 3.

18. Calothysanis punctinervis rigida subsp. n.

More reddish in tone than the two Javan races (p. punctinervis Prout, 1916, and p. piperata Prout, 1935), the irroration only moderate, the line of the hindwing very straight.

Batoeriti, 3 ♂♂, 1 ♀.

19. Anisodes argentosa Prout.

Anisodes argentosa Prout, Nov. Zool., xxvii, 278 (1920) (Borneo).

A single \mathfrak{P} , from Mondoktoempang, adds materially to the known range of this species ($L\epsilon p.~Cat.~61,~p.~123$) and, as it is rather large, dull and dark, may present a new subspecies.

SUBFAM. LARENTIINAE.

20. Xanthorhoë sordidata inimica subsp. n.

3, 36-37 mm. Smaller than s. sordidata (Moore, 1888, N. India), darker, much less brown, well marked above, rather weakly beneath, but with large cell-dots; antemedian line of forewing less sharply angled than in some of the forms.

Mondoktoempang, the type 3. From Nongkodjadjar, E. Java, similar 2 33 were received, less fresh.

21. Ecliptopera rectilinea impingens subsp. n.

The brown parts of r. rectilinea (Warr., 1894) are here blackish fuscous, thus much darker than in any other known subspecies.—Forewing with the second white line (boundary of dark basal area) bent close to costa so as to reach costal margin about perpendicularly, not obliquely inward; the large triangular costal patch encroached upon distally by a continuation inward of the very slender white line of SC⁵; both the slender pale lines immediately outside the postmedian continued forward at least to SC⁴; the white streak from apex more oblique, thus coalescing with, or at least touching, the subterminal between the radials, thence continuing a little less close to termen, so that the terminal spots enclosed in cellules 2 and 1b are less small.

Mondoktoempang, November, 3 33.

Possibly a separate species; the worn Sambawa ♀ mentioned in Rés. Sci. Voy. Ind. Or. Néerl. Prince Leopold, iv, 68, is either synonymous or a closely similar race.

22. Loxofidonia obfuscata pallidistriga subsp. n.

Xanthorhoë pallidistriga Warr. M.S. in Mus. Tring.

After repeated comparisons of a variable series from Bali and Java with the still more variable "Coremia" obfuscata Warr. (1893) = "Cidaria" bareconia Swinh. (1894), besides its aberration "Perizoma" rubridisca Warr. (1896), I have come to the conclusion that the undoubtedly different impression which it makes is attributable to the cumulative effect of the following factors or tendencies.

Forewing with median band better defined, generally with a stronger central projection distally, perhaps also with more sinuous proximal edge, the pale areas which bound it often clearer, the basal patch never (as in some obfuscata) confluent with the median band; apical patch never so outstandingly darkened as in the majority of obfuscata; the \mathcal{S} (also sometimes even the \mathcal{P}) has the subapical dark patches (costal and terminal) divided by an often broad pale-grey or whitish oblique streak, the rest of the terminal area either predominantly dark (\mathcal{P}) or predominantly pale (\mathcal{S}).—Hindwing often in the \mathcal{S} , occasionally even in the \mathcal{P} , with a more noticeable pale postmedian band than in obfuscata.

Batoeriti, $4 \circlearrowleft \circlearrowleft$, $1 \circlearrowleft$ (loc. typ.). Also $3 \circlearrowleft \circlearrowleft$ and $11 \circlearrowleft \circlearrowleft$ from E. Java, which were studied too late for inclusion in my previous paper, $2 \circlearrowleft \circlearrowleft$ from W. Java and one from Korintji, W. Sumatra.

The median band is often blackish, occasionally rather dark brown; the $\varphi\varphi$, notwithstanding their darkness, commonly show on this band a pronounced slaty-blue admixture, recalling *Xanthorhoë griseiviridis* Hmpsn. (1895).

23. Collix astathes sp. n.

3♀, 40 mm. On the upperside extremely similar to hypospilata Guen. (1858), though somewhat more heavily marked; the irregularly lunulate subterminal line continuous, not (as in hypospilata) inclined to break up into isolated dots and dashes. Underside showing the closer relationship to be with the group basicristata Prout (1923), practenta Prout (1929), mesopora Prout (1932); possibly a subspecies of practenta. Larger and darker than the last-named; underside with scarcely any indication of longitudinal dark markings, only a very faint suffusion about the median vein and along the proximal part of the costal region

(forewing); cell-spots large (as in praetenta), postmedian narrower than in praetenta, on the hindwing bandlike and almost uninterrupted, though intensified and slightly broadened about cellules 6, 3 and 1b, on the forewing a little more interrupted and maeular, though still essentially bandlike, somewhat inbent between costa and 1st radial; subterminal of forewing very feeble, except as paired spots between the radials and single detached ones between the medians and at fold, the costal end almost or quite obsolete; subterminal of hindwing slightly better developed than that of the forewing, but with corresponding spots prominent.

Batoeriti, 1 3, 1 \(\). Also, perhaps in a slightly less brownish form, from E. Java: Singolangoe, 2 33; Kletak, 1 3.

24. Chloroclystis inaequata scotosema subsp. n.

3. Rather larger than i. inaequata (Warr., 1896, as Sesquiptera), hindwing with the patch of specialized sealing dark fuseous instead of brown, its two lines beneath as a rule more approximated.

Batoeriti, 11 ♂♂, 11 ♀♀.

The \$\phi\$ (unknown in the name-typical race) is, as was expected, extremely similar to those of olivata Warr. (1901) and conversa Warr. (1897), though with the postmedian of the forewing more strongly angled than in the latter; or like that of coronata (Hb. [1809–13]) *\frac{1}{2}\$ except that the hindwing is paler and with a more distinct, less angled line on the upperside.

25. Hybridoneura abnormis Warr.

3. Hybridoneura abnormis Warr., Nov. Zool., v, 25 (1898) (Khasis).

Q. (?) Neoscelis metachlora Hmpsn., Journ. Bomb. Nat. Hist. Soc., xviii, 47, t. E, f. 9 (1907) (Ceylon). Hybridoneura abnormis Prout, Ins. Samoa. iii. (3) 145 (1928).

Mondoktoempang, $t \ 3$, $2 \ 9$.

The σ is closely like Warren's type, while the $\varphi\varphi$ match Hampson's *meta-chlora* very well. I doubt whether there is more than one species in the genus, whilst the extreme inadequacy of material prevents any separation into subspecies.

26. Ziridava xylinaria Walk.

Ziridava xylinaria Walk., List Lep. Ins., xxvi, 1550 [1863] [Sarawak).
Ziridava xylinaria ab. subrubida Warr., Nov. Zool., iv, 71 (1897) (Bonthain, S. Celebes).
Ziridava xylinaria subrubida Prout. Rés. Sci. Voy. Ind. Or. Prince Leopold, iv (6) 69 (1932) (Celebes).

Mondoktoempang, $1 \circlearrowleft$, $1 \circlearrowleft$; Batoeriti, $5 \circlearrowleft \circlearrowleft$.

The $\Im \Im$, especially those from E. Bali, seem to agree essentially with the type of *subrubida* Warr., which, on the strength of a second \Im (Tondano-Menado) as well as the geographical probabilities, I registered as a separate subspecies. In any ease it is, however, very close to the forms which are considered typical and the one \Im shows nothing distinctive. The $\Im \Im$ are more clouded, especially in the distal area beneath; of the Celebes examples I wrote that the "large size and a difference of tone and relative strength of some of the markings on the

¹ The date is taken from Hemming's Hubner, vol. 1, p. 275 (February 1937). This work has brought together or made known for the first time an enormous amount of important information on Hübner's voluminous writings.

upperside seem to me as characteristic as the reddish and heavily dark-marked underside on which Warren based the form." Here again, as with so many of the smaller Indo-Australian Geometridae, the material is still insufficient for any systematic revision, but as extensive collections of moths are now being received at Tring from Celebes, it will perhaps be possible to return to the species in dealing with them; my first attempt at an analysis of the subspecies (Ins. Samoa, iii, 146, 1928) was somewhat premature, but gives a general indication of our knowledge up to that date. With augmented material and more concentrated study I am now preparing a further revision. Known localities are Ceylon, India, Formosa, Luzon, Borneo, Sumatra, Java, Bali, Flores, Celebes, Ceram, New Guinea and its islands and N. Queensland.

27. Sauris interruptata (Moore).

Remodes triseriata part., Moore, Lep. Ceyl., iii, 485 (1887) (Ceylon) (err. det., \circ nec \circ). Remodes interruptata Moore, Lep. Coll., Atk., p. 270 (1888) (N. India).

Batoeriti, 1 3, 1 9.

Large, the δ extremely so. Perhaps a subspecies, but a pair received from E. Java help to link it up with those of the Malay Peninsula and India.

28. Polynesia curtitibia Prout.

Polynesia curtitibia Prout, Nov. Zool., xxix, 345 (1922) (Khasis).

Mondoktoempang, $5 \mathcal{P}$, in October.

Rather large, very heavily marked, the colour more as in the \Im than in the \Im of curtitibia. Probably at least a valid race; the discovery of the \Im may well show it to be a distinct species. Until we have both sexes for study I have elected to leave it unnamed; there is already one close ally (potential race) from Ceylon awaiting further elucidation.

29. Eois lunulosa (Moore).

Pseudasthena lunulosa Moore, Lep. Ceyl., iii, 450, t. 200, ff. 5, 5a (1887) (Ceylon).

Psilocambogia lunulosa Hmpsn., Ill. Het., ix, 40 (1893) (Ceylon).

Anthyria lunulosa Swinh., Tr. Ent. Soc. Lond., 1894, p. 191 (1894) (Khasia Hills); Meyr., ibid., 1897, p. 70 (1897) (Pulo Laut).

Cambogia lunulosa Hmpsn., Faun. Ind., Moths, iii, 421 (1895) (Khasis; Ceylon).

Pseudosthena ochracea Warr., Nov. Zool., i, 395 (1894) (Khasia Hills; Sikkim) (ab.).

Batoeriti, 1 3.

By the clear yellow postmedian band, the somewhat enlarged cell-mark of the hindwing and other details this specimen is certainly referable here rather than to grataria (Walk., 1861), of which Doherty brought one from Bali. Whether the two so-called species, however, are nearly parallel series of one extraordinarily variable species remains somewhat uncertain. Both have a wide distribution, grataria exceptionally so, extending from W. Africa and Natal to the Admiralty Islands and New Hanover. E. lunulosa was already known from India, Malaya, Borneo, Hainan and Formosa; "Chrysocraspeda" duplicilinea Wileman (1911), from the last-mentioned country, has been registered as a separate subspecies (see Ent. Mitt. Deutsch. Ent. Mus., iii, 247), but I now doubt its validity as such.

30. Eois sordida (Warr.).

Pseudasthena sordida Warr., Nov. Zool., iv, 223 (1897) (Oinanissa [Dutch Timor]).

Batoeriti, 2 33.

These agree essentially with the hitherto unique type (also a 3), but nothing very definite can yet be said about them. Considerably smaller than plumbacea (Warr., 1894), on which see Nov. Zool., xxxvii, 9 and Journ. F.M.S. Mus., xvii, 56, and without the yellowish outer spot.

SUBFAM. GEOMETRINAE.

31. Buzura praeparva sp. n.

3, 47 mm. Essential structure of recursaria (Walk., 1860), the 3 antenna being unipectinate, with long branches, SC¹⁻² short-stalked, fovca well developed (section Amraica). Much smaller than any previously known species in the section.—Forewing with the termen almost regular in shape, not noticeably sinuous and only very faintly waved; coloration and scheme of markings as in recursaria; cell-spot smaller, even when allowance has been made for the greatly reduced wing-expanse; antemedian line more regular, almost evenly curved, thickened not only by a costal spot but also by small teeth on M and SM², the former followed and the latter preceded by very slight indentation; postmedian with the inward subcostal bend deeper than in most recursaria, the projection at R¹ less acute, as there is no recession of the line until behind R²; brown subapical blotch and terminal dets much as in recursaria.—Hindwing and underside with similarly reduced cell-spots.

Prapetagoeng, 1 3, somewhat worn.

32. Buzura insularis illucescens Prout.

Buzura insularis illucescens Prout, Bull. Hill Mus., ii, 146 (1928) (W. Sumatra).

Mondoktoempang, 1 3.

The specimen is very badly rnbbed, especially on the forewing. I suspect that it may represent a separable race, though the few Javan which I have seen are almost typical; but I cannot form a definite judgment without more and better-conditioned specimens. The forewing apparently lacks the lines and almost certainly the costal spots, but these can be either present or absent in i. insularis (Warr., 1894, Nias); basal maculation apparently reduced, that of the subterminal and of the termen normal. Hindwing with the diffuse median shade and incomplete postmedian line heavily blackened.

33. Catoria olivescens maturata.

Mondoktoempang, October (3 type) and November (allotype).

Upperside deeper olive-grey than in o. olivescens Moore (1888), cell-ring of the hindwing, especially in the $\mathfrak P$, approaching the elongate form which characterizes o. longistigma Prout (1929). Underside of $\mathfrak P$ suffused with grey, of $\mathfrak P$ similar to that of o. longistigma.

The same race has been received from Java, 2 \circlearrowleft from Nongkodjadjar, 1 \circlearrowleft from Mount Malang.

For a revision of this genus see Nov. Zool., xxxv, 132-141 (1929).

34. Catoria kalisi sp. n.

3, 42 mm. Nearest to tamsi Prout (1929), but materially paler. Lower part of face white, upper partly fuscous.

Forewing with the long stalk of SC¹⁻² connected by an extremely short bar, or anastomosing at a point (or hardly more) with C; whitish with a tinge of olive, the markings on the whole slightly smaller than in tamsi, notably the outer postmedian and its costal spot.—Hindwing with the cell-mark slightly less elongate than in tamsi and not filled in with black (more like that of hemiprosopa, Turn., 1904); the double postmedian (but especially its proximal element) thickened between SC² and R³, sharply bent at the radial fold.

Underside very different from that of tamsi; white, the black cell-mark developed on the forewing only, the costal spots not very strong, a dark distal band also developed on forewing only, not quite reaching termon and nowhere as wide as the space which separates it from the cell-spot, the usual white apical and midterminal spots present.

Batoeriti,
1 ${\it \circlearrowleft}.$ A second, 2 mm. larger, from Nongkodjadjar, E. Java, 4,000 feet.

Cleora Curt.

Abundant and very interesting material in the alienaria group (see Bull, Hill Mus., iii, 179 seq.). A great part of it is referable to the decisaria subgroup, which I am making the subject of a separate article. C. repetita (Butl., 1882), received from both the W. Bali stations, shows much less extreme variability than in Celebes, the Moluccas and eastward; the specimens are mostly rather dark, or with dark median area or thick black median line. C. alienaria (Walk.), from all three localities, though not in large numbers, is very variable in size, as well as in coloration, perhaps on the whole rather large; in my revision (l.c.) I should presumably have referred them to C. a. gelidaria (Walk, [1863]), together with those from E. Java, but I still doubt (or increasingly doubt) whether the racial differentiation is valid: C. hermaea Prout (1929), also new for Bali, was taken only at Batoeriti; one of has the forewing predominantly bright ochreous and another has an ochreous streak along its hindmargin—both apparently rare aberrations, though represented in a marvellous series of hermaea sent from E. Java. Of C. concentraria (Snell., 1877), a few were collected at Mondoktoempang, an extremely fine and variable series at Batoeriti; these are the first records for Bali, but by no means unexpected, as the Tring Museum has one specimen from Lombok. C. injectaria (Walk., 1860) will almost certainly have to be added, as two rather grey or dark ♀♀ of the puzzling processaria form (Bull. Hill Mus., iii, 213) were obtained, one at Prapetagoeng, one at Batoeriti.

35. Racotis monognampta sp. n.

3, 43–48 mm. Antenna nearly as in *inconclusa* (Walk., 1860), but with the teeth continuing triangular almost to the base.—Forewing above difficult to distinguish except by its tone, ground-colour a little paler, some of the markings somewhat blacker, notably the circumscription of the cell-mark; the (red-brown, black-mixed) median spot at hindmargin large and strong; dark suffusions of distal area relatively strong, the pale (but not sharply defined) midterminal spot larger than in the Bali form of *inconclusa*.—Hindwing also strongly marked and with somewhat enlarged midterminal spot; at once distinguishable by the post-

median line, which, after its (weak or moderate) bend at R¹, is much more direct right to the abdominal margin, even the inward curve at fold very weak or wanting; the usual black dashes developed on the outer side of this line.—*Underside* nearly as in the cleanest, darkest-marked *inconclusa*; cell-marks strong, lines very slight, showing chiefly as short punctiform extensions from the costal spots of forewing; borders on the whole not quite so broad as in *inconclusa*, sharply defined proximally, the whitish apical and midterminal spots generally stronger.

Mondoktoempang, October and November, 8, 33; also 13 from

Prapetagoeng.

Bali seems well provided with Racotis. Besides a series of the widely distributed inconclusa, Kalis obtained 2 33 (Batoeriti) and 1 9 (Mondoktoempang) of anaglyptica Prout (1935) and 2 33 (Batoeriti) of neonephria Prout (1935).

36. Hyposidra salebrata sp. n.

 \circlearrowleft , 32–34 mm. In the relatively short forewing and the character of the markings nearest to the well-known janiaria Guen. (1858). Abundantly distinct in the dark-grey tone (browner on the underside) and in a number of other characters.—Forewing with the sinus between the apex and midtermen rather more pronounced than in janiaria \circlearrowleft ; median and postmedian lines much more outbent in the middle; fringe much more strongly spotted.—Hindwing with termen more crenulate and with a more pronounced tooth at R^3 ; fringe more strongly spotted.

Prapetagoeng, 4 33.

37. Hypochrosis spodographa sp. n.

 \bigcirc , 34 mm. In structure and seheme of maculation very near *festivaria* (Fabr., 1794). Head and body concolorous with wings; the palpus and parts of the front of pectus and of legs more reddish (as also in some brightly coloured *festivaria*).

Wings (especially hindwing) with termen appreciably more rounded than in festivaria \(\varphi \); ground-colour as in festivaria, the grey strigulation rather strong and slightly more bluish.—Forewing with costal edge more broadly ochreous, with the blackish irroration and strigulae copious; basal area also somewhat mixed with oehreous, its boundary oblique inward from costa at 4 mm. to hindmargin at 3 mm.; median area whitish instead of dark green (and with no white edgings), very extensive, its distal boundary anteriorly only 2 mm. from termen (slightly more from SCs forward, on account of an inward eurvature), about R3 making an inward sweep almost to cell, then nearly vertical to M2 and after a further turn inward running to hindmargin at about 4 mm. from tornus; an elongate ochreous cell-mark, connected with costal shade by a dark-mixed patch in front of DC1; scattered blackish dots and short dashes on the pale area, accumulating in places so as to suggest two very incomplete and irregular lines, both traceable from M hindward and curving round so as to meet close to hindmargin; the antemedian curved outward at fold, inbent before and behind the curve, the postmedian perpendicular from base of M1, directed basad immediately after erossing M2, sharply angled at fold, thence forming a strong outward curve. ---Hindwing with the eostal area broadly and abdominal margin narrowly fleshyochreous, the rest coloured as the forewing; the whitish, dark-dotted patch

nearly semicircular, based on SM², its curved side reaching cell-fold, its distal end very near tornus.——Underside ochreous, the forewing slightly more reddishtinged than the hindwing; much like some of the least reddish undersides of festivaria but with the dark suffusion about the base of the medians of the forewing very slight.

Mondoktoempang in November, 1 ♀.

38. Hypephyra sterrhoticha sp. n.

3, 30–32 mm. Closely related to subangulata Warr. (1896), from the N.E. Himalayas, agreeing in having the antenna dentate-fasciculate, the hindtibia very strongly swollen. Apex of forewing somewhat less acute, angle of hindwing much weakened; median area of forewing variably clouded with grey (as proves to be also the case with subangulata), the clouding chiefly developed in posterior part; distal areas above and beneath, except at apex of forewing, as a rule solidly dark, especially beneath, where even the ochreous apical suffusion is only weak and restricted.

Mondoktoempang, 5 33.

39. Chiasmia hypomesta sp. n.

3, 20 mm. Scarcely larger than Ch. minuta Warr. (1905), from North Borneo; antenna ciliated in long fascicles, as in that species. Head pale, the face with two blackish dots at upper edge and sometimes very small dots across the middle. Thorax and abdomen above more heavily dark-clouded than in minuta.

Forewing with termen very slightly more oblique than in minuta; very pale buff, scarcely so yellow as in that species, cell-spot nearly as large; markings rather less brown, heavier; spots of proximal area sometimes in part confluent; lines of median area arising from enlarged costal spots, the postmedian with its distal edge oblique outward anteriorly; posterior part of this area (from M and base of M²) forming a still more solid blotch than in minuta, median line from costa to R¹ thickened into a broad shade, more or less confluent with cell-spot; distal markings nearly as in minuta, the proximal subterminal shade less interrupted in the middle.—Hindwing with median shade thicker and proximal subterminal less interrupted than in minuta.

Batoeriti, 2 33.

The only similarly banded Indian species of the group, radiata Warr. (1897), is generally much larger and has the subterminal line farther from the termen and more sinuous, the median band of the hindwing dark throughout and other differences from hypomesta.

40. Lomographa frixa sp. n.

3, 22–24 mm. Face smooth. Palpus about 1, moderately rough-scaled. Antenna with pectinations about as long as in *trimaculata* (Vill., 1789), a longer distal part non-pectinate.

Wings much more thinly scaled than in typical Lomographa, in all but the freshest specimens subdiaphanous.—Forewing much less broad, costa almost straight to near apex, termen oblique, little curved till behind M^1 ; cell $\frac{1}{2}$; SC^{1-2} coincident; fovea present; grey; costal margin and to a less extent some of

the veins more normally sealed, whitish, with blackish spots or longitudinal streaks; eell-dot minute; very faint traces of lines arising from the three principal costal spots, curved at first, then approximately parallel with termen; a fine dark terminal line; fringe chequered, dark grey and whitish.——Hindwing with termen slightly sinuate between the radials, otherwise nearly smooth; concolorous with forewing or slightly paler; a small cell-dot and indication of two lines; termen and fringe nearly as on forewing.

Forewing beneath nearly as above; hindwing rather paler and less weakly marked.

Batoeriti, 5 & d, only the type in really good condition; Mondoktoempang, 2 & d, fair, October and November. Also from E. Java, 2 dd, darker, Nong-kodjadjar and Singolangoe. A worn \circ from Medan, Sumatra, has stood for many years in my collection; antenna simple.

Systematic position very doubtful; perhaps a new genus will be required.